#### (1) GENERAL INFORMATION:

- (i) APPLICANTS: LI, Yi and RUBEN, Steven M.
- (ii) TITLE OF INVENTION: HUMAN AMINE RECEPTOR POLYPEPTIDES
- (iii) NUMBER OF SEQUENCES: 10
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: STERNE, KESSLER, GOLDSTEIN AND FOX, P.L.L.C.
  - (B) STREET: 1100 NEW YORK AVENUE, NW, SUITE 600
  - (C) CITY: WASHINGTON
  - (D) STATE: DC
  - (E) COUNTRY: UNITED STATES OF AMERICA
  - (F) ZIP: 20005-3934
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk

  - (B) COMPUTER: IBM PC compatible (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: 09/314,006
  - (B) FILING DATE: 19-MAY-1999
  - (C) CLASSIFICATION:
- (vi)PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 08/467,559
  - (B) FILING DATE: 06-JUN-1995
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: STEFFE, ERIC K
  - (B) REGISTRATION NUMBER: 36,688
  - (C) REFERENCE/DOCKET NUMBER: 1488.0840001/EKS/HCC
  - (ix) TELECOMMUNICATION INFORMATION:
    - (A) TELEPHONE: (202) 371-2600
    - (B) TELEFAX: (202) 371-2540
- (2) INFORMATION FOR SEQ ID NO:1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1380 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: CDS

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# (B) LOCATION: 252..1262

# (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

	CI	'AG	AGC'	ГAG	CAGG	AGTA	AC T	CTCA	TGGA	A CC	TTGG	AAAC	CAT	TCTT	CAA	TTGA	ATTTCA	60
	GG	GC2	ACA'	TTT	GAAT	CAGT	AC C	CAGG	GGCA	C TG	TACT	ATGC	TCC	CAGC	TGG	ACCT	TAGTTT	120
	CC	CTC	CTC	CTC	GTTT	CACC	CT G	TGAG	TAAT	r aa	CAGA	CAAA	ATT	TTTT	TTT	TTTT	TTTTTT	180
	ТТ	TT	TTT	TTT '	TTTT	TGCC	CT C	CAGT	GGAG	A AG	GTGG	CCAG	TTC	TCAG.	ACA	GAGG	AAGAGT	240
	AG	AGAAATCATA A ATG AGA GCT GTC TTC ATC CAA GGT GCT GAA GAG CAC CCT Met Arg Ala Val Phe Ile Gln Gly Ala Glu His Pro 1 5 10											C CCT s Pro	290				
+	GC Al	CG (	GCA Ala 15	TTC Phe	TGC Cys	TAC Tyr	CAG Gln	GTG Val 20	AAT Asn	GGG Gly	TCT Ser	TGC Cys	CCC Pro 25	AGG Arg	ACA Thr	GTA Val	CAT, His	338
	n Th	T ( ir I 30	CTG Leu	GGC Gly	ATC Ile	CAG Gln	TTG Leu 35	GTC Val	ATC Ile	TAC Tyr	CTG Leu	ACC Thr 40	TGT Cys	GCA Ala	GCA Ala	GGC Gly	ATG Met 45	386
	VCT 华Le 切	'G <i>F</i>	ATT [le	ATC Ile	GTG Val	CTA Leu 50	GGG Gly	AAT Asn	GTA. Val	TTT Phe	GTG Val 55	GCA Ala	TTT Phe	GCT Ala	GTG Val	TCC Ser 60	TAC Tyr	434
	TT Ph	C F	AAA Lys	GCG Ala	CTT Leu 65	CAC His	ACG Thr	CCC Pro	ACC Thr	AAC Asn 70	TTC Phe	CTG Leu	CTG Leu	CTC Leu	TCC Ser 75	CTG Leu	GCC Ala	482
	СТ	G G u <i>F</i>	SCT Ala	GAC Asp 80	ATG Met	TTT Phe	CTG Leu	GGT Gly	CTG Leu 85	CTG Leu	GTG Val	CTG Leu	CCC Pro	CTC Leu 90	AGC Ser	ACC Thr	ATT Ile	530
	CG Ar	C I	CA Ser 95	GTG Val	GAG Glu	AGC Ser	TGC Cys	TGG Trp 100	TTC Phe	TTC Phe	GGG Gly	GAC Asp	TTC Phe 105	CTC Leu	TGC Cys	CGC Arg	CTG Leu	578
	CA Hi 11	s T	ACC Thr	TAC Tyr	CTG Leu	GAC Asp	ACC Thr 115	CTC Leu	TTC. Phe	TGC Cys	CTC Leu	ACC Thr 120	TCC Ser	ATC Ile	TTC Phe	CAT His	CTC Leu 125	626
	TG Cy	T T s F	he	ATT Ile	TCC Ser	ATT Ile 130	GAC Asp	CGC Arg	CAC His	TGT Cys	GCC Ala 135	ATC Ile	TGT Cys	GAC Asp	CCC Pro	CTG Leu 140	CTC Leu	674
	TA Ty	T C	CCC	TCC Ser	AAG Lys 145	TTC Phe	ACA Thr	GTG Val	AGG Arg	GTG Val 150	GCT Ala	CTC Leu	AGG Arg	TAC Tyr	ATC Ile 155	CTG Leu	GCA Ala	722
	GG. G1	АТ уТ	GG Tp	GGG Gly 160	GTG Vaļ	CCC Pro	GCA Ala	GCA Ala	TAC Tyr 165	ACT Thr	TCG Ser	TTA Leu	TTC Phe	CTC Leu 170	TAC Tyr	ACA Thr	GAT Asp	770

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							AGC Ser 180										818
							CTC Leu									-	866
							TGC Cys									-	914
							AGA Arg										962
K							GCC Ala										1010
ű n							ATA Ile 260										1058
							AGC Ser										1106
n H							TGG Trp										1154
	Pro	ATC Ile	ATC Ile	TAT Tyr 305	GTC Val	TTT Phe	TCC Ser	TAC Tyr	CAG Gln 310	TGG Trp	TTT Phe	CGG Arg	AAG Lys	GCA Ala 315	CTG Leu	AAA Lys	1202
ļ <del>u</del>							GTC Val										1250
		TAC Tyr 335			TGA!	rtcc:	TTC 7	ract <i>i</i>	TAA	GC A	GCA <i>l</i>	AGGA	G TAC	GAC	CTCA		1302
	CAGGAAAGAT AAGTGGCACT GTGACCGCGG GCTGTGTGGT GTTGAGTTTG TGGGCATGCT													1362			
	TCC	AGGA	CAG (	CATG	GGTT		į										1380

## (2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 337 amino acids
    (B) TYPE: amino acid
    (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Arg Ala Val Phe Ile Gln Gly Ala Glu Glu His Pro Ala Ala Phe Cys Tyr Gln Val Asn Gly Ser Cys Pro Arg Thr Val His Thr Leu Gly Ile Gln Leu Val Ile Tyr Leu Thr Cys Ala Ala Gly Met Leu Ile Ile Val Leu Gly Asn Val Phe Val Ala Phe Ala Val Ser Tyr Phe Lys Ala Leu His Thr Pro Thr Asn Phe Leu Leu Leu Ser Leu Ala Leu Ala Asp Met Phe Leu Gly Leu Leu Val Leu Pro Leu Ser Thr Ile Arg Ser Val Glu Ser Cys Trp Phe Phe Gly Asp Phe Leu Cys Arg Leu His Thr Tyr 105 🗓 Leu Asp Thr Leu Phe Cys Leu Thr Ser Ile Phe His Leu Cys Phe Ile 120 Ser Ile Asp Arg His Cys Ala Ile Cys Asp Pro Leu Leu Tyr Pro Ser Lys Phe Thr Val Arg Val Ala Leu Arg Tyr Ile Leu Ala Gly Trp Gly 150 Wal Pro Ala Ala Tyr Thr Ser Leu Phe Leu Tyr Thr Asp Val Val Glu Thr Arg Leu Ser Gln Trp Leu Glu Glu Met Pro Cys Val Gly Ser Cys Gln Leu Leu Leu Asn Lys Phe Trp Gly Trp Leu Asn Phe Pro Leu Phe 200 Phe Val Pro Cys Leu Ile Met Ile Ser Leu Tyr Val Lys Ile Phe Val Val Ala Thr Arg Gln Ala Gln Gln Ile Thr Thr Leu Ser Lys Ser Leu Ala Gly Ala Ala Lys His Glu Arg Lys Ala Ala Lys Thr Leu Gly Ile Val Val Gly Ile Tyr Leu Leu Cys Trp Leu Pro Phe Thr Ile Asp Thr 265 Met Val Asp Ser Leu Leu His Phe Ile Thr Pro Pro Leu Val Phe Asp

Ile Phe Ile Trp Phe Ala Tyr Phe Asn Ser Ala Cys Asn Pro Ile Ile

290 295 300 Tyr Val Phe Ser Tyr Gln Trp Phe Arg Lys Ala Leu Lys Leu Thr Leu 310 315 Ser Gln Lys Val Phe Ser Pro Gln Thr Arg Thr Val Asp Leu Tyr Gln 330 Glu (2) INFORMATION FOR SEQ ID NO:3: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 29 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA'(genomic) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3: CGGAATTCCT UATGAGAGCT GTCTTCATC 29 (2) INFORMATION FOR SEQ ID NO:4: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 32 base pairs (B) TYPE: nucleic acid N (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4: CGGAAGCTTC GTCATTCTTG GTACAAATCA AC 32 (2) INFORMATION FOR SEQ ID NO:5: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 30 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic)

•		(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:5:										
	CGG	GATCC	CT CCATGAGAGC TGTCTTCATC	3									
	(2)	) INFORMATION FOR SEQ ID NO:6:											
		(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 29 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear										
		(ii)	MOLECULE TYPE: DNA (genomic)										
		( <del>-</del>	GROUPINGS STORY TO THE STORY TONY TO THE STORY TO THE STORY TO THE STORY TO THE STORY TO THE STO										
giren E-s	1		SEQUENCE DESCRIPTION: SEQ ID NO:6:										
A12 !		GATCCCG CTCATTCTTG GTACAAATC											
1111	] (2) ]	INFO	RMATION FOR SEQ ID NO:7:										
A12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and and a	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 34 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single										
i.		•	(D) TOPOLOGY: linear										
the min dean man	L L	(ii)	MOLECULE TYPE: DNA (genomic)										
122 122 123 124 124		(vi)											
132	Ŧ		SEQUENCE DESCRIPTION: SEQ ID NO:7:										
			TT GCCACCATGA GAGCTGTCTT CATC	34									
	(2)	INFO	RMATION FOR SEQ ID NO:8:										
		(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 61 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear										
		(ii)	MOLECULE TYPE: DNA (genomic)										
	•	. <b>.</b> *											
		(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:8:										
	CTAG	GCTCGA	AG TCAAGCGTAG TCTGGGACGT CGTATGGGTA GCATTCTTGG TACAAATCAA	60									
	C,			61									

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#### (2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 365 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: not relevant
  - (D) TOPOLOGY: not relevant
- (ii) MOLECULE TYPE: protein

### (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Ala Arg Leu Leu Val Leu Ala Ser Pro Pro Ala Ser Leu Leu Pro Pro 1. 5 10 15

Ala Ser Glu Gly Ser Ala Pro Leu Ser Gln Gln Trp Thr Ala Gly Met 20 25 30

Gly Leu Leu Val Ala Leu Ile Val Leu Leu Ile Val Val Gly Asn Val 35 40 45

Leu Val Ile Val Ala Ile Ala Lys Thr Pro Arg Leu Gln Thr Leu Thr 50 55 60

Asn Leu Phe Ile Met Ser Leu Ala Ser Ala Asp Leu Val Met Gly Leu 65 70 75 80

Leu Val Val Pro Phe Gly Ala Thr Ile Val Val Trp Gly Arg Trp Glu
85 90 95

Tyr Gly Ser Phe Phe Cys Glu Leu Trp Thr Ser Val Asp Val Leu Cys 100 105 110

Val Thr Ala Ser Ile Glu Thr Leu Cys Val Ile Ala Leu Asp Arg Tyr 115 120 125

Leu Ala Ile Thr Ser Pro Phe Arg Tyr Gln Ser Leu Leu Thr Arg Ala 130 135 140

Arg Ala Arg Ala Leu Val Cys Thr Val Trp Ala Ile Ser Ala Leu Val 145 150 155 160

Ser Phe Leu Pro Ile Leu Met His Trp Trp Arg Ala Glu Ser Asp Glu 165 170 175

Ala Arg Arg Cys Tyr Asn Asp Pro Lys Cys Cys Asp Phe Val Thr Asn 180 185

Arg Ala Tyr Ala Ile Ala Ser Ser Val Val Ser Phe Tyr Val Pro Leu 195 200 205

Cys Ile Met Ala Phe Val Tyr Leu Arg Val Phe Arg Glu Ala Gln Lys 210 215 220

Gln Val Lys Lys Ile Asp Ser Cys Glu Arg Arg Phe Leu Gly Gly Pro 225 230 235 240

Ala Arg Pro Pro Ser Pro Glu Pro Ser Pro Ser Pro Gly Pro Pro Arg
245
250
255

Pro Ala Asp Ser Leu Ala Asn Gly Arg Ser Ser Lys Arg Arg Pro Ser 260 265 270

Arg Leu Val Ala Leu Arg Glu Gln Lys Ala Leu Lys Thr Leu Gly Ile 275 280 285

Ile Met Gly Val Phe Thr Leu Cys Trp Leu Pro Phe Phe Leu Ala Asn 290 295 300

Val Val Lys Ala Phe His Arg Asp Leu Val Pro Asp Arg Leu Phe Val 305 310 315 320

Phe Phe Asn Trp Leu Gly Tyr Ala Asn Ser Ala Phe Asn Pro Ile Ile 325 330 335

Tyr Cys Arg Ser Pro Asp Phe Arg Lys Ala Phe Gln Arg Leu Leu Cys 340 345 350

Cys Ala Arg Arg Ala Ala Cys Arg Arg Arg Ala Ala His 355 . 360 365

#### (2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 353 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: not relevant
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein

#### (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Asp Asp Asp Leu Glu Arg Gln Asn Trp Ser Arg Pro Phe Asn Gly Ser 1 10 15

Asp Gly Lys Ala Asp Arg Pro His Tyr Asn Tyr Tyr Ala Thr Leu Leu 20 25 30

Thr Leu Leu Ile Ala Val Ile Val Phe Gly Asn Val Leu Val Cys Met 35 40 45

Ala Val Ser Arg Glu Lys Ala Leu Gln Thr Thr Thr Asn Tyr Leu Ile 50 55 60

Val Ser Leu Ala Val Ala Asp Leu Leu Val Ala Thr Leu Val Met Pro 65 70 75 80

Trp Val Val Tyr Leu Glu Val Val Gly Glu Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp Val Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile Asp Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr Ser Ser Lys Arg Arg Val Thr Val Met Ile Ser Ile Val Trp Val Leu Ser Phe Thr Ile Ser Cys Pro 150 Leu Leu Phe Gly Leu Asn Asn Ala Asp Gln Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val Tyr Ser Ser Ile Val Ser Phe Tyr Val Pro 185 Phe Ile Val Thr Leu Leu Val Tyr Ile Lys Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg Val Asn Thr Lys Arg Ser Ser Arg Ala Phe Arg 215 Ala His Leu Arg Ala Pro Leu Lys Glu Ala Ala Arg Arg Glu Lys Asn Gly His Ala Lys Asp His Pro Lys Ile Ala Lys Ile Phe Glu Ile Gln Thr Met Pro Asn Gly Lys Thr Arg Thr Ser Leu Lys Thr Met Ser Arg Arg Lys Leu Ser Gln Gln Lys Glu Lys Lys Ala Thr Gln Met Leu Ala Ile Val Leu Gly Val Phe Ile Ile Cys Trp Leu Pro Phe Phe Ile Thr His Ile Leu Asn Ile His Cys Asp Cys Asn Ile Pro Pro Val Leu Tyr 315 Ser Ala Phe Thr Trp Leu Gly Tyr Val Asn Ser Ala Val Asn Pro Ile 325 330 Ile Tyr Thr Thr Phe Asn Ile Glu Phe Arg Lys Ala Phe Leu Lys Ile

Leu